BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20026

In the Matter of		
Amendment of Parts 2 and 15 of the Commission's Rules to Deregulate the Equipment Authorization Requirements for Digital Devices	)	ET Docket No. 95-19
To The Commission	)	

COMMENTS OF

THE UNISYS CORPORATION

1. INTRODUCTION

The Unisys Corporation by its officers and pursuant to section 1.415 of the Commission's rules, hereby comments on the issues raised by the Commission in its Notice of Proposed Rulemaking (FCC 95-46, released February 7, 1995) (the "NPRM") in the above-captioned proceeding. Unisys is a long-standing participant in FCC proceedings and voluntary standards activities which have been the basis for regulations applicable to computers and Information Technology Equipment (ITE). Unisys commends the Commission's new deregulation approach to interference control based on its acknowledgment that:

A. "There is currently a..."high rate of compliance and lack of significant interference from personal computers and their peripherals..."[1]

B. "It is possible to reduce the regulatory burden on manufacturers without compromising our objective of controlling interference from personal computing equipment."[2]

C. "There is growing interest in the international harmonization of standards, test methods and product approval procedures to better facilitate trade." [3] and the proposed changes .."would align the FCC equipment authorization requirements for personal computers with those used in other parts of the world."[4]

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[1] FCC ET Docket 95-19, para.1
[2] FCC ET Docket 95-19, para. 1
[3] FCC ET Docket 95-19, para.1
[4] FCC ET Docket 95-19, para.1

II. SUMMARY OF UNISYS POSITION

A. The Commission should modify its rules to permit verification with a Declaration of Conformity (DOC) for all ITE. However, the DOC proposed by the Commission requires some burdensome bureaucratic information that does not appear to increase compliance.

B. Verification/DOC of modular PC components is the most effective way to control interference from PC's, notwithstanding any theoretical difficulties in verification. However, the Commission's proposal should be broadened to include interconnecting cables and any other PC components with significant interference potential.

C. The Commission's proposal to require EMI test laboratories to be NVLAP accredited is burdensome and does not appear to be justifiable in the context of the deregulation thrust of this rulemaking.

D. A simplified "logo" type labeling program should be adopted.

E. The Commission should also take this opportunity to harmonize its Class A and Class B definitions of digital devices with the latest international standards.

F. The rule modifications described in this section should be expeditiously adopted and implemented by the Commission.

III. SPECIFIC COMMENTS/PROPOSALS

A. The Commission should modify its rules to permit verification with a Declaration of Conformity (DOC) for all ITE. However, the DOC proposed by the Commission requires some burdensome bureaucratic information that does not appear to increase compliance. As ITE and other digital devices become increasingly regulated worldwide, it is Unisys' belief that every effort should be made to simplify, harmonize and ensure that any rules are demonstrably necessary and consistent with the pace of technology and distribution of these products. To that extent, the Commission's proposal to diminish authorization procedures for personal computers is commendable and timely. Unisys strongly endorses the Commission's proposal to eliminate the bilateral certification process for personal computers, but recommends it be replaced with the "verification process proven effective with devices, and coupled with a Declaration of Compliance for all ITE devices. The DOC will provide a mechanism of accountability that will tend to level the plane field for all suppliers. This approach would provide common

FCC authorization procedures for Class A and B ITE as well as close alignment with European regulations. In the continued development of the world market, it is Unisys' hope that a single DOC based on internationally accepted tests to a single set of minimum necessary limits, will become a reality in the not so distant future. The Commission's actions in this rulemaking proceeding is an opportunity to step purposefully in that direction.

Unisys urges the Commission to reconsider the requirement that the DOC contain an identification of the compliance test report by date and number. This requirement could unwittingly reimpose delays in going to market, especially in large organizations where testing, development, manufacturing, marketing and documentation could all be conducted at different geographic locations. Such information would likely not enhance compliance and be of little or no interest to the consumers receiving the DOC. In general, Unisys recommends the Commission adopt an "elevator" approach to the character of the DOC. In most elevators these days, the elevator safety inspection certificate, which were in full display in elevators is now replaced by a notice that states that the certificate is available in the plant engineer's office. For EMI compliance accountability purposes, it should be sufficient for the Commission to require that the DOC identify an "office" that can provide the test report and any other pertinent information in a reasonable amount of time.

B. Verification/DOC of modular PC components is the most effective way to control interference from PC's, notwithstanding any difficulties in verification. However, the Commission's proposal should be broadened to include interconnecting cables and any other PC components with significant interference potential. Unlike the conditions that existed when the Commission formulated its personal computer regulations, the development, manufacture and distribution of such products, is increasingly characterized by open architecture, modular components, and multiple sources of assembly and distribution. To that extent, the final assembler of personal computers could be virtually powerless to ensure the controls necessary to achieve EMI compliance of the integrated products. Requirement of component EMI authorization would place the control responsibility at the source of the EMI potential and almost certainly result in fewer "Band-Aids" and more comprehensive solutions in the control of

EMI from PCs. Unisys recommends the Commission also require EMI authorization of some "unauthorized" subassemblies that were not identified in its rulemaking proposals. Although some of the unauthorized subassemblies such as disk drives and memory expansion are probably "EMI benign", others such as "accelerator cards" and microprocessor upgrades might not be, and should therefore also be authorized. Moreover, Unisys recommends the Commission also require the authorization of interconnecting PC cables. To the extent that PC enclosures would be tested and "rated", interconnecting cables should be similarly treated. It is Unisys belief that the technology better supports cable testing and rating than it does relatively nondescript small enclosures. Surface transfer impedance or conventional cable shielding effectiveness methods are well documented and could be readily employed for such purposes.

To the extent that the PC enclosure and its electronics are a composite radiator, it could be difficult to demonstrate "shielding effectiveness" of at least 6dB from 30MHz to 1000MHz. Perhaps the figure of merit will have to be reduced or modified in portions of the frequency range, but in any case, the Commission should not be deterred in its thrust to control PC enclosures.

C. **The Commission's proposal to require EMI test laboratories to be NVLAP accredited is burdensome and does not appear to be justifiable in the context of the deregulation thrust of this rulemaking.** The Commission's willingness to reduce PC EMI authorization procedures is stated in the ET Docket 95-16 as being based on its perception "that there is currently a high rate of compliance and lack of significant interference from personal computers," and that "it is possible to reduce the regulatory burden on manufacturers without compromising our objective of controlling interference..." Unisys then must question the Commission's proposal to add a "big brother" provision for the cadre of test laboratories that have contributed to this success. If there are incompetent laboratories, they have not prevented the Commission's program for controlling interference from ITE from being successful. Why then encumber all of the good laboratories with controls aimed at a few who have not altered the essential success of the Commission's program?

Moreover, it is Unisys observation that third party accreditation schemes such as the Commission's NVLAP proposal do not ensure competence of continuing daily activities. Personnel come and go and conditions change continually as compared to widely spaced and predictable third party assessments. The technical standards, to which the Commission's staff, organizations such as Unisys, and independent laboratories have contributed, coupled with random agency audits of laboratory practices, should provide reasonable control of competency. Last, but not least, free market users will provide the ultimate control.

If for some reason, the Commission is not convinced that third party accreditation of EMI test laboratories is neither necessary nor effective, then Unisys urges the Commission to broaden the possibilities for "accreditation", including manufacturer ISO 9000 registration, and take no action until the outcome of Mutual Recognition Agreement negotiations with the European Community is known.

D. **A simplified "logo" type labeling program should be adopted.**

It is Unisys view that product "label relief" should be a priority in consideration of personal computer regulation. The labeling now required to be placed on internationally distributed personal computers threatens to limit desirable enhancements in product size. Unisys' opinion is that the FCC's EMI compliance statement labels are not meaningful to the vast majority of personal computer users. Such statements might be better positioned in user manuals where tutorial information concerning EMI can be included. A simple logo type product label, if any, would probably be sufficient, and especially consistent with the thrust to require component EMI authorization

E. **The Commission should also take this opportunity to harmonize its Class A and Class B definitions of digital devices with the latest international standards.** Unisys urges the Commission to revisit the EMI class definitions as part of this initiative to deregulate PC EMI authorization. These definitions require manufacturers/distributors to distinguish between products intended to be "marketed exclusively for use in business, industrial, and commercial environments" (Class A) and those "marketed for use anywhere, including residential environments:" There is limited districting in the USA that would coincide with whatever characteristics might be used to describe business,

industrial and commercial environments, and it is fair to say that residences could probably be found in many such environments. Lacking the environmental data and the interpretive skill to apply these definitions, it is probable that many manufacturers/distributors over classify their products, using the more stringent Class B designation. The Class B EMI limits, as the Commission is undoubtedly aware, are significantly more difficult and costly to comply with, thereby impeding the wider distribution of ITE.

Simpler definitions of EMI classes, as included in the second edition of CISPR Publication 22, would require only that a Class A or B ITE comply with the Class A or B limits. Accompanying guidance information then describes the degree of interference protection provided by the limits. Adoption of the CISPR 22 definitions by the Commission would (1) simplify the rules, (2) permit manufacturer flexibility to designate EMI classes of products consistent with competitive and marketplace demands, (3) provide an opportunity to reduce overclassification and attendant product cost, and (4) harmonize USA EMI class definitions with the definitions used in all other countries.

IV. CONCLUSION

Unisys commends the Commission for its acknowledgment of the success of the industry and government efforts to control interference from ITE, and the Commission's initiative to reduce or eliminate burdensome and unnecessary controls. We urge that the Commission not diminish it thrust by imposing ineffective and burdensome third party accreditation on EMI test laboratories. Moreover, Unisys appeals to the Commission to broaden the perspective of its deregulation initiative to consider proposals presented in this document for equalizing ITE EMI authorization procedures, and harmonizing EMI class definitions with international standards. Unisys pledges its support to the Commission's well-reasoned decisions in this matter and urges the Commission to complete, adopt and implement these new rules in the most expeditious manner.

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